

## **AMENDMENTS TO THE CLAIMS**

*This listing of claims replaces all prior versions and listings of claims in the application.*

### **Listing of claims:**

- 1-11. (Cancelled)
12. (Currently Amended) A method for extracting a fermentation ~~hydrocarbon-containing~~ product selected from the group consisting of 4-hydroxybenzoic acid, benzaldehyde, a catechol, benzylalcohol, cinnamic acid, phenol, and mixtures thereof, from a fermentation liquid comprising:
- (i) conducting a fermentation using a biocatalyst to form a fermentation ~~hydrocarbon-containing~~ product in a fermentation liquid;
  - (ii) contacting the fermentation liquid with a solvent-impregnated porous carrier, wherein the solvent-impregnated porous carrier has a density different from the fermentation liquid and the fermentation ~~hydrocarbon-containing~~ product is sorbed by the solvent-impregnated carrier; and
  - (iii) separating the fermentation ~~hydrocarbon-containing~~ product from the solvent-impregnated porous carrier, wherein the fermentation product is selected from the group consisting of 4-hydroxybenzoic acid, benzaldehyde, a catechol, benzylalcohol, cinnamic acid, phenol, and mixtures thereof.
13. (Previously Presented) A method according to claim 12, wherein the separation is carried out by steam stripping, back-extraction, heating, or combinations thereof.
14. (Previously Presented) A method according to claim 12, wherein the solvent-impregnated porous carrier in step (iii) is recycled through to step (ii).
15. (Previously Presented) A method according to claim 12, wherein said solvent impregnated carrier comprises a polymeric carrier.

16. (Previously Presented) A method according to claim 15, wherein said polymeric carrier comprises one or more polystyrene, polypropylene, polytetrafluoroethylene, silicone, polyethylene, or regenerated cellulose group.

17. (Previously Presented) A method according to claim 16, wherein said polymeric carrier is crosslinked.

18. (Previously Presented) A method according to claim 12, wherein said solvent impregnated carrier comprises an inorganic carrier, preferably selected from silica, alumina, aluminosilicates, and combinations thereof.

19. (Currently Amended) A method according to claim 12, wherein said fermentation hydrocarbon-containing product is 4-hydroxybenzoic acid, benzylalcohol, 3-methylcatechol, benzaldehyde, cinnamic acid, or a mixture thereof.

20. (Previously Presented) A method according to claim 12, wherein said biocatalyst is selected from *Pseudomonas putida*, *Escherichia coli*, *Sacharomyces cerevisiae*, *Lactobacillus* species, or *Aspergillus niger*.

21. (Previously Presented) A method according to claim 12, wherein

- said solvent impregnated carrier is inserted at or near the bottom of a fermentor containing said fermentation liquid and is collected at or near the top of said fermentor, wherein said solvent impregnated carrier has a density that is lower than that of said fermentation liquid; or

- said solvent impregnated carrier is inserted at or near the top of a fermentor containing said fermentation liquid and is collected at or near the bottom of said fermentor, wherein

said solvent impregnated carrier has a density that is higher than that of said fermentation liquid.

22. (Previously Presented) A method according to claim 12, which is carried out continuously.

23. (Previously Presented) A method according to claim 12, wherein said porous solvent impregnated carrier has an average pore diameter of from 2.5 nm to 50  $\mu\text{m}$ .

24. (Previously Presented) A method according to claim 12, wherein the porosity is from 30 to 80%.

25. (New) A method according to claim 12, wherein the catechol is 3-methylcatechol.